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HI 93758B-0
Reagent Vial

Safety Data Sheet

According to Regulation (EC) No. 1907/2006

Revision Date: 2008-12-01
Reason for Revision: REACH Compliance and General Update

SECTION 1: IDENTIFICATION OF THE PRODUCT AND COMPANY

Product Name: HI 93758B Reagent Vial

Additional Product Codes:

Application: Determination of Phosphorus in Water Samples

Company Information (USA):
Hanna Instruments, Inc.
584 Park East Dr, Woonsocket, Rhode Island, USA 02895

Technical Service Contact Information:
1-800-426-6287 (8:30AM - 5:00PM ET)
+1-401-766-4260 (8:30AM - 5:00PM ET)

USA Emergency Contact Information: 1-800-424-9300 (Chemtrec 24Hr. Emergency)

International Emergency Contact Information: +1-703-527-3887 (Chemtrec 24Hr. Emergency)

E-mail Address: tech@hannainst.com

SECTION 2: HAZARD IDENTIFICATION

Irritating to eyes and skin.

SECTION 3: COMPOSITION AND COMPONENT INFORMATION

Component: Sulfuric Acid

EC-No.: 231-639-5

CAS-No.: 7664-93-9

Hazard: C

Phrases: R: 35

Content: > 5% - < 15%

SECTION 4: FIRST AID MEASURES

After Inhalation: Call in physician.

After Skin Contact: Wash effected area with plenty of water. Dab with polyethylene glycol 400. Remove contaminated clothing

After Eye Contact: Rinse out with plenty of water for at least 10 minutes with the eyelid held wide open. Call in ophthalmologist.

After Swallowing: Make victim drink plenty of water (if necessary several liters), avoid vomiting (risk of perforation!). Call in physician.

General Information: Remove contaminated, soaked clothing immediately and dispose of safely.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

Water spray, Carbon Dioxide, Dry Chemical Powder, Appropriate Foam.

Special Risks:

Development of hazardous combustion gases or vapors possible in the event of fire. Hydrogen may form upon contact with metals (danger of explosion!). The following may develop in event of fire: Sulfur Oxides

Special Protective Equipment:

Do not stay in dangerous zone without suitable chemical protection clothing and self-contained breathing apparatus.

Additional Information:

Product itself is non-combustible. Cool container with spray water from a safe distance. Contain escaping vapors with water.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Take up with liquid-absorbent material. Clean up affected area and dispose according to local regulation.

Environmental Precautions:

Do not discharge into the drains/surface waters/groundwater.

Additional Notes:

Render harmless: neutralize with diluted sodium hydroxide solution or by throwing on lime, lime sand, or sodium carbonate.

SECTION 7: HANDLING AND STORAGE

Handling:

Avoid generation of vapors/aerosols. Do not inhale substance.

Storage:

Tightly closed. In a well-ventilated place at +15 to +25 °C, protected from light. Accessible only for authorized persons.

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION

Ingredients:

SULFURIC ACID
EXPOSURE LIMITS - GERMANY

Source	Type	Value
TRGS 900	OEL	1 mg/m³

EXPOSURE LIMITS - DENMARK

Source	Type	Value
OEL	TWA	1 mg/m³

Engineering:

Safety shower and eye wash.

Personal Protective Equipment:

Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled.

Respiratory Protection:

Required when vapors/aerosols are generated.

Protective Gloves:

Rubber or plastic

Eye Protection:

Goggles or face mask

Industrial Hygiene:

Change contaminated clothing. Wash hands after working with substance.

SECTION 9: PHYSICAL/CHEMICAL PROPERTIES

Appearance:	Colorless liquid	***Odor:***	Odorless	***Density at 20° C:***	1.03 g/cm³
Melting Point:	ND	***Boiling Point:***	ND	***Solubility:***	Soluble
pH at 20° C:	~ 1	***Explosion Limit:***	NA	***Flash Point:***	NA
Thermal Decomp.:	NA				

SECTION 10: STABILITY AND REACTIVITY

Conditions to be Avoided:

Strong Heating

Hazardous Polymerization:

Will not occur.

Further Information:

Not available

Hazardous Decomposition Products:

In the event of fire: See section 5.

Substances to be Avoided:

Alkali metals, alkali compounds, ammonia, alkaline earth compounds, alkalis, acids, alkaline earth metals, metals, metal alloys, permanganates, combustible substances, organic solvents, halogenates

SECTION 11: TOXICOLOGICAL INFORMATION

Quantitative data on the toxicity of this product is not available.

APPLICABLE TO PARTIAL COMPONENT:
The following applies to Sulfuric acid, as the pure substance:
Acute toxicity
LC50 Inhalation, Rat: 510 mg/kg/2h.
LD50 Oral, Rat: 2140 mg/kg (using 25% solution).
Specific symptoms in animal studies:
Eye irritation test (rabbit): burns.
Skin irritation test (rabbit): burns.
Toxicological values are not available due to other dangerous properties of the substance.
Subacute to chronic toxicity
Applicable to partial component(s):
Bacterial mutagenicity: Ames test: negative.
No teratogenic effect in animal experiments.

In Case of Inhalation: After inhalation of aerosols: irritative symptoms in the respiratory tract.

In Case of Skin Contact: Irritations.

In Case of Eye Contact: Corneal lesions.

In Case of Ingestion: Damage to the affected mucous membranes.

Further Data: The product should be handled with the usual care when dealing with chemicals. Property that must be anticipated on the basis from the components of the preparation:

SECTION 12: ECOLOGICAL INFORMATION

Quantitative data on the toxicity of this product is not available.

APPLICABLE TO PARTIAL COMPONENT:
The following applies to Sulfuric acid, as the pure substance:
Biologic degradation:
Methods for the determination of biodegradability are not applicable to inorganic substances.
Behavior in environmental compartments:
Concentration in organisms is not to be expected.
Ecotoxic effects:
Quantitative data on the ecological effect of this product are not available.
Further ecologic data:
The following applies to sulfuric acid: biological effects: harmful effect on aquatic organisms. Harmful effect due to pH shift. Toxic effect on fish and algae. Caustic even in diluted form. Does not cause biological oxygen deficit. Endangers drinking water supplies if allowed to enter soil and/or waters in large quantities. Neutralization possible in waste water treatment plants.
Daphnia toxicity: Daphnia magna EC50 : 29 mg/L/24 h (calculated on the pure substance).

Further Data: DO NOT ALLOW TO ENTER WATERS, WASTE WATERS, OR SOIL!

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Chemical residues are generally classified as special waste and thus covered by local regulations. Contact local authorities or disposal companies for advice. Handle contaminated packaging in the same way as the substance itself.

SECTION 14: TRANSPORTATION INFORMATION

Land:

ADR/RID: 9, II
UN-No. : 3316
Name : CHEMICAL KIT

Sea:

IMDG: 9/UN 3316/PG II
Name : CHEMICAL KIT

Air:

ICAO/IATA: 9/UN 3316/PG II
Name: CHEMICAL KIT

Transport data applies to the COMPLETE KIT!

SECTION 15: REGULATORY INFORMATION

Labeling according to EC Directives:

Symbol: Xi: Irritant

R-phrases: 36/38: Irritating to eyes and skin.

S-phrases: 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Contains:

SECTION 16: OTHER INFORMATION

Text of R-phrases under Section 3

35: Causes severe burns.

Revision Information

Revision Date: 2008-12-01

Supersedes edition of: 2008-01-03

Reason for revision: REACH Compliance and General Update

Legend

NA: Not Applicable
ND: Not Determined

THE INFORMATION CONTAINED HEREIN IS BASED ON THE PRESENT STATE OF OUR KNOWLEDGE. IT CHARACTERIZES THE PRODUCT WITH REGARD TO THE APPROPRIATE SAFETY PRECAUTIONS. IT DOES NOT REPRESENT A GUARANTEE OF THE PROPERTIES OF THE PRODUCT.